

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT***STATIONARY SOURCE COMPLIANCE DIVISION***APPLICATION PROCESSING AND CALCULATIONS**PAGES
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511145DATE
06/04/10PROCESSED
BY R. SanfordCHECKED
BY**PERMIT TO CONSTRUCT/ PERMIT TO OPERATE****COMPANY NAME:**

Chevron Products Company

MAILING ADDRESS:P.O. Box 97
El Segundo, CA 90245**EQUIPMENT LOCATION:**324 W. El Segundo Blvd.
El Segundo, CA 90245**EQUIPMENT DESCRIPTION:****Section D: Facility Description and Equipment Specific Conditions**

Description	ID No.	Connected To	RECLAIM Source Type	Emissions and Requirements	Conditions
Process 16: STORAGE TANKS					
System 3 10: <u>DOMED</u> EXTERNAL FLOATING ROOF TANK					S13.3 <u>S13.9</u>
STORAGE TANK, <u>DOMED</u> EXTERNAL FLOATING ROOF, NO. 189, RIVETED SHELL, WITH EXTERNAL HEATING SYSTEM (STEAM HEAT SOURCE); 61790 BBL; DIAMETER: 115 FT; HEIGHT: 34 FT 6 IN, WITH <u>DOMED COVER, GEODESIC</u> FLOATING ROOF, PONTOON, WELDED PRIMARY SEAL, CATEGORY A, LIQUID MOUNTED, WIPER TYPE SECONDARY SEAL, CATEGORY A, RIM MOUNTED, WIPER TYPE GUIDEPOLE, SLOTTED, WITH GASKETED SLIDING COVER, POLE SLEEVE, AND POLE WIPER A/N: 434009 <u>511145</u>	D1364			BENZENE: (10) [40CFR61 Subpart FF_02, 12-4-2003]; HAP: (10) [40CFR 63 Subpart CC, #3A, 5-25-2001]	H23.1 K67.32 <u>K67.51</u> K171.5 <u>K171.13</u>

Shows changes that will be made to temporary permit to operate that is currently in Section H of the RECLAIM/Title V facility permit. Applicable permit pages from Section H of the current permit are contained in [the engineering file](#).

System Conditions



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S13.3 All devices under this system are subject to the applicable requirements of the following rules or regulations:

- VOC - District Rule 1149
- VOC - District Rule 463
- VOC - District Rule 1178

[RULE 1149, 5-2-2008; **RULE 1178, 4-7-2006; RULE 463, 5-6-2005**][Systems subject to this condition : Process 16, System 1 , 2 , **3** , 5]

Note: The Tank 189 permit unit will be moved from Process 16, System 3 (External Floating Roof Tank) to Process 16, System 10 (Domed External Floating Roof Tank).

S13.9 All devices under this system are subject to the applicable requirements of the following rules or regulations:

- VOC - District Rule 1149
- VOC - District Rule 463
- VOC - District Rule 1178

For Rule 463 applicability, only subdivision (d) in the March 11, 1994 amendment, or equivalent requirements in the future amendments, shall apply to domed external floating roof tanks. This does not preclude any requirements specified in Rule 1178.

[RULE 1149, 5-2-2008; **RULE 1178, 4-7-2006; RULE 463, 5-6-2005**][Systems subject to this condition : Process 16, System **10**]

Device Conditions

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Benzene	40CFR61, SUBPART	FF

[**40CFR 61 Subpart FF, 12-4-2003**][Devices subject to this condition: D1237, D1318, D1326, D1338, D1343, D1345, D1354, **D1364**, D1365, D1369, D1379, D1380, D1381, D1383, D1385, D1388, D1396, D1406, D1407, D1427, D1434, D2151, D3958]

K67.32 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- Tank throughput in barrels.
- Commodity/product stored and time period of its storage.
- Actual vapor pressure, in psia, of each commodity/product stored.
- Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank.
- Other records that may be required to comply with the applicable requirements of District Rules 463(d), 1149 and 1178, and 40CFR63, Subpart CC.



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[**RULE 1303(b)(2)-Offset, 5-10-1996**][Devices subject to this condition : D1358, [D1364](#), D1468, D1474]

K67.51 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

- Tank throughput in barrels.
- Commodity/product stored and time period of its storage.
- Actual vapor pressure, in psia, of each commodity/product stored.
- Hydrocarbon concentration measurements done in the vapor space above the floating roof of the tank.
- Other records that may be required to comply with the applicable requirements of District Rules 463(d), 1149, 1178, 40CFR 61 Subpart FF, and 40CFR 63 Subpart CC.
- [**RULE 1149, 5-2-2008; RULE 1178, 4-7-2006; RULE 463, 5-6-2005; 40CFR 61 Subpart FF, 12-4-2003; 40CFR 63 Subpart CC, 6-23-2003**] [Devices subject to this condition: [D1364](#), D1380, D1381]

~~**K171.5** The operator shall provide to the District the following items:~~

- ~~• Final drawings and/or specifications of the geodesic dome cover, slotted guidepole sleeve and wiper, and other tank appurtenances to be installed/constructed shall be submitted to the District within 30 days after its construction.~~

~~[**RULE 1178, 4-7-2006**][Devices subject to this condition: [D1364](#)]~~

K171.13 The operator shall provide to the District the following items:

- Final Drawings and/or specifications of the geodesic dome cover to be installed/constructed shall be submitted to the District within 30 days after its construction.

[**RULE 1178, 4-7-2006**][Devices subject to this condition : [D1364](#), D1380, D1381, D1396]

BACKGROUND:

Chevron Products Company (ID 800030) submitted AN 434009 on August 25, 2004 for installation of a Geodesic Dome Cover to meet the requirements of a Consent Decree (CD) between Chevron and EPA. The dome cover was to be installed by July 31, 2007 as a supplemental environmental project (SEP) under the CD. Tank 189 was storing recovered oil at the time. According to Rule 1178(b)(2)(B), the applicability of the doming requirement in (d)(2)(A) for waste oil or recovered oil tanks shall be based on the monthly average true vapor pressure. The monthly average vapor pressure was to be determined through sampling "at a frequency committed to in writing by the facility no later than January 1, 2003". Chevron had been collecting quarterly vapor pressure samples for the subject tank. A sample frequency of at least once per month is required to determine a monthly average vapor pressure. Chevron was informed that Tank 189 is subject to the doming requirement of (d)(2)(A) as a Phase II tank since Chevron did not collect the required samples to verify that the monthly average true vapor pressure is less than or equal to 3 psia doming threshold.

Since a dome was required under Rule 1178, the tank was disqualified as a candidate SEP under the CD. Chevron requested that a P/C be issued for installation of the dome cover under Phase II

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of Rule 1178. A permit to construct was issued under A/N 434009 in December 2005. A one-year extension of the PC was granted in December 2006. The P/C expired in December 2007 without initiation of dome construction. Due to lack of progress on dome construction, a request for a second extension was denied in January 2008.

The following changes were also made to the tank description under A/N 434009:

- Revise the equipment description to “correct” the roof type to “PONTOON” from “DOUBLE DECK”. The Double Deck roof was apparently replaced by a Pontoon roof in the 1980s without a permit to construct.
- Revise the equipment description to include an “existing” EXTERNAL HEATER
- Revise the equipment description to include “RIVETED SHELL”. According to Chevron the tank shell is a riveted shell not a welded shell.
- Revise the equipment description to include an existing slotted guidepole.

Permit to construct A/N 434009 in Section H of the RECLAIM/Title V permit is now operating as a temporary permit to operate that includes the non-dome related changes listed above. The descriptor “Dome Cover, Geodesic” was removed from the permit.

Chevron submitted A/N 511145 for a permit to construct for construction of a dome cover. For compliance with Rule 1178, the dome cover must be installed by December 31, 2010. The permit will be issued as a permit to construct/permit to operate in Section D of the RECLAIM/Title V permit. Chevron is not proposing any other changes to the subject tank.

PERMIT HISTORY:

The permitting history for this tank is shown in the following table.

Permit History for Tank 189 (D1364) (A/N 511145)

Permit to Construct		Permit to Operate		Description of Modification
No.	Issue Date	No.	Issue Date	
				According to records, this was a cone roof tank until 1950. At that time the cone roof was replaced with a floating Pan roof.
A21144	1964	P04928		Not clear from the records what this application was for. Mentioned that the tank was utilized for storage of recovered oil.
C12686	6/28/77			Convert roof from Pan type to Double Deck type and added a secondary seal.
C25843	9/19/79			Replaced the secondary seal with a new type. Primary seal is listed as metallic shoe.
C29105	8/15/80	M18451		Replaced the secondary seal with a new type. No increase in emissions. Primary seal is listed as metallic shoe.
171137	9/26/88	D37745	4/24/91	Replaced the metallic shoe primary seal with a liquid mounted wiper type and replaced the secondary seal (also a wiper type).



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Permit to Construct		Permit to Operate		Description of Modification
No.	Issue Date	No.	Issue Date	
244616		D77080	9/23/93	Installation of an external heating system (heating/pumping pad) for separation of oil/water. Heater was installed in 1990 but application was submitted in 1991 as a Class III.
393029	na.	F49920	3/11/02	Administrative Appl: Correct the seal type from "Metallic Shoe" to "Wiper Type".
403096	na.	F53855	7/30/02	Administrative Appl: To remove "RIVETED" from the description of the tank roof since this describes the tank construction and not the roof and change the tank height based on a recent strapping chart.
434009	12/13/05	na.	na.	Revise roof type description from Double deck" to "pontoon"; add an existing 'external heater' to the equipment description; add "riveted shell" to the description; and add the existing slotted guidepole to the equipment description. PC originally covered installation of a dome cover but the PC expired without the dome being installed.
511145	na.	na.	na.	Application for installation of a geodesic dome cover.

Based on this permit history, the subject tank is a pre-NSR tank because changes made to the tank after 1976 did not result in an emission increase that triggered NSR.

COMPLIANCE RECORD REVIEW:

There is no record of compliance problem related to the operation of this storage tank. Facility ID 800030 does not have any outstanding NC's or NOV's. A summary of the NC's and NOV's issued to the facility is shown in Appendix A.

FEE ANALYSIS

Table 1 – Summary of Fee Analysis

A/N	Equipment Description	BCAT/ CCAT	Fee Schedule	Fee Type	Fiscal Year (1)	Fee
511145	External Floating Roof Storage Tank	335904 (BCAT)	C	Modification	09-10	\$ 3,244.91
511140 (2)	RECLAIM/Title V Permit	555009 (BCAT)	na.	RECLAIM/Title V Permit Revision	09-10	\$ 1,687.63
				Total		\$ 4,932.54
				Fees Paid		\$ 4,932.54
				Outstanding Balance		\$ 0.00

(1) Based on the date that the application was submitted.

(2) Title V revision application submitted for A/Ns 511145 and 511146.

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BY**PROCESS DESCRIPTION:**

A description of Tank No. 189 (D1364) is contained in the equipment description above. There are no permit conditions that limit the commodity type, throughput, or vapor pressure. The following table shows the roof openings / fittings for the existing pontoon roof.

Summary of Roof Opening / Fitting Controls and Seals

Roof Opening / Fitting or Seal Type	Roof Seal and Opening/Fitting Configuration	
	No	Type
Access Hatch	2	Cover: bolted & gasketed
Automatic Gauge Float Well	1	Cover: bolted & gasketed
Gauge Hatch / Sample Well	2	Weighted mechanical actuation; Cover: gasketed
Roof Legs	35	Adjustable; sock
Rim Vent	0	
Vacuum Breaker	2	Weighted mechanical actuation; gasketed
Roof Drain	0	
Slotted Guidepole Well & Guidepole	1	Gasketed sliding cover with pole sleeve and wiper.
Primary Seal	1	Wiper Type, Vapor mounted
Secondary Seal	1	Wiper Type, Rim mounted

CALCULATION:

Tank 189 is a pre-NSR storage tank that is not subject to any permit limits on throughput, commodity or vapor pressure. EPA Tanks 4.0.9d is utilized to estimate VOC emissions. The EPA Tanks 4.0.9d printouts for the tank are contained in [the engineering file](#). For consistency with the calculations for A/N 434009, the calculations will be based on storage of recovered oil (vp @ avg. temp. = 1.97 psia) with an annual throughput of 8,875,500 gallon/yr.

The VOC estimates are summarized below:

- Current EFR Tank (pre-modification) = 1,301 lb/yr = 3.6 lb/day
- EFR Tank with dome cover (post-modification) = 253 lb/yr = 0.7 lb/day

The installation of the dome cover will cause a decrease in estimated VOC emissions of 2.9 lb/day.

EVALUATION AND RULE REVIEW:**California Environmental Quality Act (CEQA)**



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According to the District's CEQA Guidelines, the net emission increase thresholds for significant effect are:

ROG: 55 lb/day
PM10: 150 lb/day
CO: 274 lb/day

CEQA analysis is not required for this modification since there is no increase in the emissions of any of these criteria air pollutants and there are no other significant environmental impacts. On the 400-CEQA form, Chevron marked "No" to all of the additional criterion that may trigger CEQA. For these reasons, CEQA does not apply.

Regulation II: Permits

212(c)(1): Public notice is required for a project if any of the modified permit unit(s) are located within 1000 feet of a school. Public notice is not required under this clause since the tank is not located with 1000-foot of a school.

212(c)(2): Public notice is required for any "new or modified facility", which has on-site emission increases exceeding any of the daily maximums specified in subdivision (g) of Rule 212. The proposed installation of a dome cover does not cause an increase in the emission of any criteria air pollutants so there is no exceedance of the following net emission increase thresholds that are specified in 212(g):

CO: 220 lb/day
NOx: 40 lb/day
Pb: 3 lb/day
ROG: 30 lb/day
PM10: 60 lb/day
SOx: 30 lb/day

212(c)(3): Public notice is required for any new or modified permit units that have an increase in toxic air contaminants that results in an increase of maximum individual cancer risk (MICR) of more than one in a million (1×10^{-6}) during a lifetime (70 years). There is no increase in MICR so public notice is not required.

212(g): 212(g) specifies that any new or modified sources subject to Regulation XIII which undergo construction or modifications resulting in an emissions increase exceeding any of the daily maximum emission thresholds (listed in the table above) will require notification. From Regulation XIII (Rule 1302), the definition of "Source" is any permitted individual unit, piece of equipment, article, machine, process, contrivance, or combination thereof, which may emit or control an air contaminant. This includes any permit unit at any non-RECLAIM facility and any device at a RECLAIM facility.

Public notice is not required under this clause since the proposed installation of a dome cover does not cause an increase in the emission of any criteria air pollutants.



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Regulation IV: Prohibitions

Rule 401: Visible Emissions

(b)(1) The subject equipment is expected to comply with visible emission limits. No increase in visible emission is expected with the requested modification.

Rule 402: Nuisance

No nuisance complaints are expected from this equipment. No complaints or violations have been recorded for the previous two years of operation of this tank. Compliance with this rule is expected.

Rule 463: Storage of Organic Liquids

This tank is subject to the requirements of this rule since it has a storage volume of greater than 19,815 gallons and stores organic liquids, which is any liquid containing VOCs. Domed External Floating Roof Tanks are subject only to the general requirements in Rule 463(d).

463(d)(1) requires a pressure-vacuum valve to be set within 10 percent of the maximum working pressure of the tank, for storage tanks between 251 and 19,815 gallons. This requirement does not apply to the subject tank since its capacity is greater than 19,815 gallons.

463(d)(2) requires the roof to float on the stored organic liquid at all time, except when emptied for cleaning or repair. The applicant is expected to comply with this requirement.

463(d)(3) requires the roof to be refloated with water, or equivalent, when being refilled with gasoline. The applicant is expected to comply with this requirement if the applicant were to choose to refill the tank with gasoline.

463(d)(4) limits the maximum vapor pressure to no more than 11 psia. The applicant is expected to comply with this requirement.

463(d)(5) requires replacement seals to be chosen from a list approved by the Executive Officer. The applicant is expected to comply with this requirement.

Compliance with the requirements of Rule 463(d) is expected.

Regulation IX: Standards of Performance for New Stationary Sources (NSPS)

None of the New Source Performance Standards are applicable to this tank since this tank was constructed prior to the applicability dates and has never been subject to a "modification" or "reconstruction" under the definitions in 40CFR60.

40CFR60.14(a): Modification - "Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies".



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40CFR60.15(a&b): Reconstruction – “An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate. "Reconstruction" means the replacement of components of an existing facility to such an extent that:

- (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
- (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.”

Installation of a dome cover does not qualify as a modification since there is no increase in emissions and does not qualify as “reconstruction” since the cost of construction does not exceed 50% of the fixed capital cost for construction of a new tank.

Regulation X: National Emission Standards for Hazardous Air Pollutants (NESHAPS)

40CFR61: Subpart FF: National Emission Standard for Benzene Waste Operations

This tank is subject to this regulation since it stores recovered oil that is recycled back into the process. This tank must meet the requirements of this rule as a waste management unit. Each tank utilized as a waste management unit under this regulation must either have a fixed roof with a closed vent system meeting the standards of 61.343 or have an internal floating roof tank that meets the standards of 40CFR60.112b(a)(1) [NSPS Subpart Kb], or have an external floating roof tank that meets the 40CFR60.112b(a)(2) [NSPS Subpart Kb].

40CFR60.112b(a)(2) for external floating roof tanks has the following requirements:

- Floating roof type must be pontoon or double deck
- The primary seal must be mechanical shoe or liquid mounted
- The secondary seal must completely cover the annular space between the roof and tank wall
- All roof appurtenances except automatic bleeder valves and rim space vents shall have a projection below the liquid surface
- Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof must be equipped with a gasketed cover, seal or lid that must remain closed at all times (ie. no visible gaps) except when the device is in actual use.
- The roof must be floating on the liquid at all times except during emptying and refilling.

This tank meets the roof type, seal type, and roof fitting/control requirements of this regulation.

40CFR63: Subpart CC: National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

This Subpart applies to petroleum refining sources and related emission sources that are specified in section 63.640 (c) (5) through (c) (7) [e.g. miscellaneous process vents (except for FCCU, SRU, and CRU vents), storage vessels, wastewater stream, equipment leaks, gasoline loading racks, marine vessel loading, etc.] that are located in a major source and emit or have equipment contacting one or more of the hazardous air pollutants (HAPs) listed in Table 1 of this subpart.



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According to Chevron, this storage tank is subject to this MACT standard as a Group 1 storage vessel. 63.646(a) of this subpart references the storage tank requirements of 40CFR63.119 through 63.121 [MACT Subpart G for the Synthetic Organic Chemical Manufacturing Industry] except as provided in 63.646(b) through (l). It is specified at 63.119(c)(1) in Subpart G that each external floating roof shall be equipped with a primary and secondary seal with the primary seal being a metallic shoe seal or liquid-mounted seal. This regulation does not contain specifications for roof closures, etc. The primary and secondary seals comply with the requirements of this regulation. Compliance with the requirements of this regulation is expected.

Regulation XI: Source Specific Standards

Rule 1149: Storage Tank Degassing

1149(c)(1) contains the requirement that VOC emissions be controlled during cleaning /degassing activities for all tanks that meet the volume / vapor pressure thresholds specified in this section. The threshold levels are:

- Volume > 39,630 gallons with Reid vapor pressure (RVP) > 2.6 psi, or
- Volume between 19,815 gallons and 39,630 gallons with RVP > 3.9 psi

This tank is subject to the requirements of this rule. Compliance with this rule is expected.

Rule 1173: Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

Chevron has an existing fugitive emission component inspection and monitoring program for compliance with the requirements of this rule. No new fugitive components will be installed under this application. Compliance with the requirements of this rule is expected.

Rule 1178: Further Reductions of VOC emissions from Storage Tanks at Petroleum Facilities

This rule is applicable to this facility since it is a petroleum refinery with facility wide VOC emissions exceeding the 20 ton/year VOC threshold.

This rule applies to all aboveground storage tanks that have capacity equal to or greater than 75,000 liters (19,815 gallons), are used to store organic liquids with a true vapor pressure greater than 5 mm Hg (0.1 psi) absolute under actual storage conditions.

1178(d)(2)(B): As discussed previously, the subject tank is a Phase II tank for which a dome must be installed by December 31, 2010

1178(d)(1)(A): This clause specifies the Roof Opening/ Fittings and Roof Seal requirements for external and domed external floating roof tanks. As shown in the table below, the proposed fittings/controls and seals for this pontoon roof and the proposed slotted guidepole fittings/control meet the requirements of this rule.



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Summary of Roof Opening / Fitting Controls and Seals

Roof Opening / Fitting or Seal Type	Roof Seal and Opening/Fitting Configuration		Applicable Rule 1178 Citation
	No	Type	
Access Hatch	2	Cover: bolted & gasketed	1178(d)(1)(A)(i)
Automatic Gauge Float Well	1	Cover: bolted & gasketed	1178(d)(1)(A)(i)
Gauge Hatch / Sample Well	2	Weighted mechanical actuation; Cover: gasketed.	1178(d)(1)(A)(ii)
Roof Legs	35	Adjustable; gasket or impervious sock cover	1178(d)(1)(A)(iii)
Rim Vent	0	Gasketed	1178(d)(1)(A)(iv)
Vacuum Breaker	2	Weighted mechanical actuation; Gasketed	1178(d)(1)(A)(v)
Roof Drain	0	Slotted membrane fabric cover that covers at least 90 percent of the area of the opening.	1178(d)(1)(A)(vi)
Slotted Guidepole	1	Gasketed sliding cover with pole wiper, and pole sleeve	1178(d)(1)(A)(ix) & 1178(d)(1)(A)(x)
Primary Seal	1	Mechanical Shoe or liquid mounted	1178(d)(1)(B)(i)
Secondary Seal	1	Rim mounted and shall not be attached to the primary seal.	1178(d)(1)(B)(ii)

This tank, with the proposed dome cover, is expected to comply with the requirements of this rule.

Regulation XIII: New Source Review

Rule 1303: Requirements (December 6, 2002)

This rule allows the Executive Officer to deny a Permit to Construct for any new, modified or relocated source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, unless BACT is used. This rule also requires modeling and offset (among other requirements) if there is a net increase in any nonattainment air contaminants for any new or modified source. The definition of "Source" in Rule 1302(ao) is "any permitted individual unit, piece of equipment, article, machine, process, contrivance, or combination thereof, which may emit or control an air contaminant. This includes any permit unit at any non-RECLAIM facility and any device at a RECLAIM facility."

The South Coast Air Basin (SOCAB) is designated in attainment for CO, NO_x and SO_x. The following are currently considered nonattainment air contaminants: NO_x, SO_x, PM₁₀, and VOC. VOC & NO_x are included since they are precursors for ozone. VOC, NO_x, and SO_x are included as PM-10 precursors. NO_x and SO_x emissions from RECLAIM Facilities are regulated under Regulation XX (RECLAIM). New Source Review requirements for NO_x and SO_x are specified in Rule 2005.



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1303(a) - Best Available Control Technology (BACT): Any new or modified source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia, must employ BACT for the new or relocated source or for the actual modification to an existing source. Per District policy, BACT is required for any increase in emissions that exceeds 1.0 lb per day on a maximum daily basis.

BACT is not applicable since there is no increase in the emission of any criteria pollutants.

1303(b) – The following requirements apply to any new or modified source which results in a net emission increase of any nonattainment air contaminant.

1303(b)(1): Modeling

1303(b)(2): Offsets

1303(b)(3) - Sensitive Zone Requirements:

1303(b)(4) - Facility Compliance:

1303 (b)(5) - Major Polluting Facilities

These requirements are not applicable since there is no increase in the emission of any criteria pollutants.

Regulation XIV: Toxic Air Contaminants

Rule 1401 New Source Review of Toxic Air Contaminants

Requirements – Rule 1401 contains the following requirements:

1) *(d)(1) MICR and Cancer Burden* - The cumulative increase in MICR which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:

(A) an increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;

(B) an increased MICR greater than ten in one million (1.0×10^{-5}) at any receptor location, if the permit unit is constructed with T-BACT;

(C) a cancer burden greater than 0.5.

2) *(d)(2) Chronic Hazard Index* - The cumulative increase in total chronic HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

3) *(d)(3) Acute Hazard Index* - The cumulative increase in total acute HI for any target organ system due to total emissions from the new, relocated or modified permit unit will not exceed 1.0 at any receptor location.

Analysis – The installation of a dome cover does not increase the emission of VOCs including volatile toxic air contaminants (TACs) listed in this rule. Since there is no increase in the emission of any TACs, no further analysis is required. Compliance with the requirements of this rule is achieved.



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Regulation XX: Regional Clean Air Incentive Market (RECLAIM)

This storage tank is not subject to RECLAIM.

Regulation XXX: Title V Permits

The initial Title V permit for the refinery was sent to Chevron on September 29, 2009 with an effective date of October 12, 2009. The permit for this storage tank will be issued as a revision of the current Title V permit. Permit revisions are categorized into the following four types: *administrative, minor, de minimis significant and significant*. The review and distribution requirements for each revision type are summarized in the following table.

Title V Permit Revisions: Review and Distribution Requirements

Revision Type	Permit Review and Distribution Requirements		
	EPA Review (45-day)	Public Notice (30-day)	Send Final Permit to EPA
Administrative	No	No	Yes
Minor	Yes	No	Yes
De Minimis Significant	Yes	No	Yes
Significant	Yes	Yes	Yes

As defined in Rule 3000, a minor Title V permit revision is any revision that:

- (1) does not require or change a case-by-case evaluation of: reasonably available control technology (RACT) pursuant to Title I of the federal Clean Air Act; or maximum achievable control technology (MACT) pursuant to 40 CFR Part 63, Subpart B;
- (2) does not violate a regulatory requirement;
- (3) does not require any significant change in monitoring terms or conditions in the permit;
- (4) does not require relaxation of any recordkeeping, or reporting requirement, or term, or condition in the permit;
- (5) does not result in an emission increase of RECLAIM pollutants over the facility starting Allocation plus nontradeable Allocations, or higher Allocation amount which has previously undergone a significant permit revision process;
- (6) does not result in an increase in emissions of a pollutant subject to Regulation XIII - New Source Review or a hazardous air pollutant;
- (7) does not establish or change a permit condition that the facility has assumed to avoid an applicable requirement;
- (8) is not an installation of a new permit unit subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63; and,
- (9) is not a modification or reconstruction of an existing permit unit, resulting in new or additional NSPS requirements pursuant to 40 CFR Part 60, or new or additional NESHAP requirements pursuant to 40 CFR Part 61 or 40 CFR Part 63; or,



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- (10) incorporates an existing general permit, as defined in subdivision (e) of Rule 3004, and its associated requirements, into another Title V permit.

This Title V permit revision meets all of the requirements above so it is a minor revision. Chevron has submitted Title V permit revision A/N 511140 for processing of this Title V permit minor revision, which will be sent to EPA for a 45-day review. Public notice is not required.

RECOMMENDATION:

Based on the foregoing evaluation, it is expected that the subject application will comply with all applicable District Rules and Regulations. It is recommended that, a Permit to Construct/Permit to Operate, Section D of the RECLAIM/Title V facility permit, be issued with the proposed changes.

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BY**Appendix A: List of Chevron NOV/NCs Issued Since January 1, 2008**

NOTICE NO.	NOTICE TYPE	VIOLATION DATE	STATUS	VIOLATION
P48119	NOV	1/10/2008	Closed on 11/25/08	FAILURE TO OPERATE F-105 AND F-205 ABOVE 1400 DEG F PER CONDITION B163.5 IN THE FACILITY PERMIT TO OPERATE, ID# 800030.
P48123	NOV	1/29/2008	Closed on 9/2/08	1) Discharge of air contaminants > 40% opacity into the atmosphere for more than three minutes in one hour from K-25. (2) Discharge of air contaminants > 20% opacity into the atmosphere for more than three minutes in one hour from K-25.
P48124	NOV	2/24/2008	Closed on 9/2/08	Failure to ensure all vent gases from the SNR were vented to the CO control ground flare (C4116) during the SNR startup per Administrative Condition #4 in Section# of the Permit to Operate, ID# 800030.
P52764	NOV	4/12/2008	Closed on 11/25/08	F/P 800030, PROCESS 5 SYSTEM 1 - OPERATING CONTRARY TO CONDITION S15.10
P12140	NOV	7/29/2008	Closed on 5/19/09	VOC LEAKS >50000 PPM RULE 1173 (d)(1)(B) - 9 COUNTS. 40 CFR FF 61.344(a)(1)(i)(A) MEASURABLE LEAKS FROM SEPARATOR COVER > 500 PPM - 4 COUNTS.
P12141	NOV	7/30/2008	Closed on 5/19/09	VOC LEAKS GREATER THAN 50,000 PPM - 21 COUNT VIOLATION RULE 1173(d)(1)(B)
P12142	NOV	7/31/2008	Closed on 5/19/09	OPEN ENDED LINES IN CRUDE #2 LSFO - 1 COUNT. 40 CFR 61.346(b)(1) PROCESS DRAIN WITHOUT WATER SEAL CONTROL.
P48721	NOV	10/2/2008	Closed on 6/18/09	1) Failure to operate refinery flare in a smokeless manner; 2) Exceeding Ringlemann 2 emissions for more than 5 minutes in one hour. (FCC Flare)
D05317	NC	4/24/2009	In Compliance	PROVIDE INFORMATION REGARDING EMERGENCY POWER CAPACITY AND PROTOCOL DURING POWER OUTAGES BY THE UTILITIES.
P48724	NOV	6/22/2009	In Compliance	EXCEEDING 20 PPMV EMISSION LIMIT ON SELECTIVE CATALYTIC REDUCTION UNIT (DEVICE C2217) ON AUXILIARY BOILER (DEVICE D2216)
D05319	NC	7/10/2009	In Compliance	PROVIDE SOURCE TEST RESULTS FOR AUXILIARY BOILER N43.
D05320	NC	1/20/2010	In Compliance	REPORT VARIOUS AND PROCESS EQUIPMENT ACCORDING TO PROCESS UNIT GUIDELINES.



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NOTICE NO.	NOTICE TYPE	VIOLATION DATE	STATUS	VIOLATION
P48725	NOV	2/23/2010	In Compliance	1) Light service leak in excess of 50,000 ppm - 1 count, (2) Leak at water separator cover exceeding 500ppm - 13 counts, (3) Equipment operating contrary to permit conditions and not in good operating condition - 2 counts.
P48726	NOV	2/23/2010	In Compliance	Equipment not in good operating condition - 3 counts.
P48727	NOV	2/23/2010	In Compliance	Light service leaks in excess of 50,000 ppm - 2 counts.
P48728	NOV	3/02/2010	In Compliance	EMISSIONS FROM WASTE SYSTEM IN EXCESS OF 500 PPM - 4 COUNTS.